

**RULES
OF
TENNESSEE DEPARTMENT OF CONSERVATION
DIVISION OF SURFACE MINING**

**CHAPTER 0400-3-11
BRICK, CLAY AND SHALE**

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0400-3-11-.01 INTRODUCTION. In addition to fulfilling all requirements of T.C.A. §§58-1540; 58-1564 and all requirements of Chapters 0400-3-1; 0400-3-6 (Regs. 1-6), the following special provisions contained in Chapter 0400-3-11 (Reg. 15) shall be adhered to by all operators of Brick, Clay or Shale mines.

Authority: T.C.A. §58-1543. *Administrative History:* Original rule filed May 24, 1974. Amendment filed November 12, 1975; effective December 12, 1975.

0400-3-11-.02 ACCESS ROADS

- (1) **DEFINITION.** "Access road or haulageway" shall mean any road constructed, improved or used by the operator (except public roads) which ends at the pit or mine and which is located within the permitted area.
- (2) **PLANNING AND CONSTRUCTION.** Operators are required to plan such roads in accordance with accepted engineering standards with proper protection of streams by culverts where traversed. No road shall be constructed up a watercourse or drainage channel proper, or so close to its banks that material would spill into the channel during construction, use or maintenance. The location of the proposed haulageway shall be identified on the site by visible markings at the time the reclamation and mining plan is preinspected and prior to commencement of construction.
- (3) **ABANDONMENT OF ACCESS ROADS.** If the haulageway is to remain as a permanent road, it shall be left properly surfaced and drained for minimum maintenance by the landowner. If the road will be abandoned, it shall be graded to the approximate contour of the adjacent land and sown in grasses.

Authority: T.C.A. §58-1543. *Administrative History:* Original rule filed May 14, 1974.

0400-3-11-.03 OPERATION, BACKFILLING AND GRADING

- (1) **MINING AND RECLAMATION PLAN.** When a new pit is proposed and it is expected that operations will be active for a period of several years, the operator's mine and reclamation plan shall be submitted to the appropriate area planning agency for comment and suggestions, all aimed at production of the mineral with low-level environmental impact and efficient land use.
- (2) **MINING REQUIREMENTS**
 - (a) Planning and initial stripping operations and mining shall be conducted so as to facilitate backfilling and grading to approximately the original or rolling topography, and elimination of all highwalls, spoil piles and water-collecting depressions.
 - (b) The adverse effects of mining must be controlled through the deposit of waste within mined-out areas of an active pit rather than through deposit of the spoil offsite. Operators shall determine

(Rule 0400-3-11-.03, continued)

which areas within a pit have future marketable mineral deposits and shall designate the other areas in the pit where the product is exhausted for deposit of spoil.

- (c) Because existing Brick, Clay and Shale pits frequently are active for many years, reclamation concurrent with mining is not feasible. Therefore, operators must exercise care to control adverse environmental effects of operations.
 - (d) Since the majority of active Clay and Shale operations are near or within urban areas, good housekeeping is essential for improving the image of mining and reducing adverse public reaction.
- (3) **WATER CONTROL.** Operators will conduct their operations so as to minimize adverse effects to streams. There shall be no mining in stream beds, and under no circumstance whatever will access roads be constructed so as to interfere with streams. Stream crossings shall include culverts or other structures adequate to accommodate peak water flow and such structures shall be removed at the conclusion of reclamation unless special circumstances preclude such action. Where there is potential for undue siltation, the operator shall construct either log or rock silt traps designed to reduce water velocity and permit the settlement of excess suspended matter.
- (4) **REGRADE REQUIREMENTS.** At the conclusion of mining the surface shall be graded to approximately the original contour, with the available material, unless the quantities of mineral produced have significantly altered the contour of the disturbed area. In such situations, the site shall be regraded to rolling topography which will blend in naturally with the surrounding terrain. No water-collecting depressions shall be left unless approved impoundments contained in the approved mining and reclamation plan are to be constructed.
- (5) **WATER IMPOUNDMENTS.** The operator may elect to impound water to provide lakes or ponds for wildlife, recreation or water supply purposes, provided such impoundments will not create conditions that will contribute to soil erosion or stream pollution or jeopardize the health, safety or property of adjacent landowners. Impoundments must be included in the mine and reclamation plan and details concerning the size and location and the construction plans of dams, embankments and spillways must be included. The proposed impoundment must meet safety requirements of appropriate State agencies and must be approved by the State Health Department if the surface area exceeds one acre.

Authority: T.C.A. §58-1543. **Administrative History:** Original rule filed May 24, 1974.

0400-3-11-.04 REVEGETATION

- (1) **REVEGETATION PLAN.** Each operator shall submit a Revegetation Plan in accordance with T.C.A. §58-1548 and Chapter 0400-3-5 (Reg. 5). Since most of the area mined for Brick, Clay or Shale will be returned to pasture or converted to industrial or recreational developments, no specific planting requirements are established. However, the plan must provide for stabilization of the area as quickly as possible after it has been mined in order to prevent erosion and siltation of streams, and to return the area to productive use.
- (2) **INITIAL PLANTING.** As soon as regrading is complete, the entire area shall be seeded with legumes and/or perennial grasses to control erosion, unless the approved after-use plan provides for construction to take place on the area and construction begins immediately. If the delay between regrading and construction is to be more than two (2) months, ground cover shall be provided.
- (3) **EVALUATION OF VEGETATION SURVIVAL.** Inspection and evaluation of vegetation for cover and survival shall be made as soon as it is possible to determine if a satisfactory stand has been established. In no instance shall this vegetative cover check be made until after the completion of the first growing season. A revegetation evaluation report shall be prepared and filed by the inspector.

(Rule 0400-3-11-.04, continued)

- (4) **STANDARDS FOR LEGUMES AND/OR PERENNIAL GRASSES.** Standards for legumes and/or perennial grasses shall require at least an eighty percent (80%) ground cover. Bare areas shall not exceed 2,500 square feet (50 feet by 50 feet) in size, nor total more than twenty percent (20%) of the area seeded unless such areas are too stony to support vegetation.
- (5) **PERFORMANCE BOND RELEASE.** After the vegetative cover has been inspected and approved, the operator shall submit his final report to the Commissioner and request release of the remaining portion of the performance bond still in force. No revegetation performance bonds will be released until the approved revegetation plan has been carried out unless the Commissioner determines that further efforts toward revegetation are impractical. No revegetation plans will be considered to have been carried out until satisfactory coverage and survival have been obtained.

Authority: T.C.A. §58-1543. **Administrative History:** Original rule filed May 24, 1974. Amendment filed November 12, 1975; effective December 12, 1975.